



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,084	05/10/2001	Tongwei Liu	10013649-1	7018

7590 12/02/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

BELL, MELTIN

ART UNIT PAPER NUMBER

2121

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/854,084

**Applicant(s)**

LIU ET AL.

**Examiner**

Meltin Bell

**Art Unit**

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to application **09/854,084** filed 05/10/2001 as well as the Specification, Drawing Corrections and Amendment all filed 8/17/04. Claims 1-24 filed by the applicant have been entered and examined. An action on the merits of claims 1-24 appears below.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 16 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8, 16 and 24 recite the limitation "said logical division" in the last two lines of each claim. There is insufficient antecedent basis for this limitation in the claims.

#### ***Claim Rejections - 35 USC § 103***

Applicants' arguments have been fully considered, but are moot in view of these new grounds of rejection. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2121

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1, 3-9, 11-17 and 19-24 are rejected under 35 U.S.C. 103(a) as being obvious over *Bertrand et al* USPN 6,085,184 "System, method and article of manufacture for a dynamic toolbar in a tutorial system" (July 4, 2000) in view of *Cook et al* USPN 5,727,950 "Agent based instruction system and method" (March 17, 1998) and in further view of *Oten et al* "A new structure-preserving dimensionality reduction approach and OI-net implementation" (4-9 May 1998).

**Regarding claim 1:**

*Bertrand et al* teaches,

- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existent database of information (Abstract), wherein said information are attributes of said subject (column 62, lines 38-46), wherein said set is to provide a base of data for said method

Art Unit: 2121

- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject
- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored
- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)
- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action (column 12, lines 17-22) relative to said subject for said objective of said outcome (column 11, lines 49-67)

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method or d) selecting and storing a random sub-sample of said training set while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up time (*Cook et al*, column 20, lines 59-67), computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Bertrand et al* as taught by *Cook et al* and *Oten et al* for the purpose of reducing start up time, computational complexity and memory space.

**Regarding claim 3:**

The rejection of claim 3 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 4:**

The rejection of claim 4 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 5:**

The rejection of claim 1 is incorporated. Claim 5's further limitations are taught in *Cook et al*:

- said subject of said training set said mapped is a separate point in said business metric space (column 15, lines 3-11)

**Regarding claim 6:**

The rejection of claim 6 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 6's limitations difference is taught in *Oten et al*:

- utilizing linear programming to calculate said optimal action, wherein said optimal action is associated with the largest number of subjects (page 691, section II, paragraph 1)

**Regarding claim 7:**

The rejection of claim 7 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 7's limitations difference is taught in *Cook et al*:

- said optimized strategy provides a logical (column 7, lines 1-12) division (column 29, lines 15-30; column 35, lines 42-57) for classification (column 33, lines 31-48) of said subject, so as to determine said optimal action of said objective of an outcome, relative to said subject (column 63, lines 8-25)

**Regarding claim 8:**

The rejection of claim 8 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 2's limitations difference is taught in *Cook et al*:

- a new subject that is not from said training set (column 4, lines 5-33; column 10, lines 43-58; column 11, lines 43-55; column 49, lines 42-52), is mapped to said best behavioral model and said stored optimized strategy, such that said new subject is

included in said classification of said logical division, so as to provide an optimal action for said objective of said outcome, relative to said new subject

**Regarding claim 9:**

*Bertrand et al* teaches,

- a bus (column 5, lines 2-21)
- a memory unit coupled to said bus (Fig. 1, items 114, 116)
- at least one processor coupled to said bus, said at least one processor for executing a method for action selection based upon an objective of an outcome relative to a subject (Fig. 1, item 110)
- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existing database of information (Abstract), said information are attributes of said subject (column 62, lines 38-46), wherein said set is to provide a base of data for said method
- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject
- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored



- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)
- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action (column 12, lines 17-22) relative to said subject for said objective of said outcome (column 11, lines 49-67)

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existing database of information, said information are attributes of said subject, wherein said training set is to provide a base of data for said method or d) selecting and storing a random sub-sample of said training set while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existing database of information, said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

Motivation – The portions of the claimed system would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up time (*Cook et al*, column 20, lines 59-67), computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify

*Bertrand et al* as taught by *Cook et al* and *Oten et al* for the purpose of reducing start up time, computational complexity and memory space.

**Regarding claim 11:**

The rejection of claim 11 is the same as that for claims 9 and 3 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 12:**

The rejection of claim 12 is the same as that for claims 9 and 4 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 13:**

The rejection of claim 13 is the same as that for claims 9 and 5 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 14:**

The rejection of claim 14 is the same as that for claims 9 and 6 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 15:**

The rejection of claim 15 is the same as that for claims 9 and 7 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 16:**

The rejection of claim 16 is the same as that for claims 9 and 8 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 17:**

*Bertrand et al* teaches,

- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existent database of information (Abstract), wherein said information are attributes of said subject (column 62, lines 38-46), wherein said set is to provide a base of data for said method
- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject
- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored
- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample utilized for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)
- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action (column 12, lines 17-22) relative to said subject for said objective of said outcome (column 11, lines 49-67)

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existent database of information, wherein said information are

Art Unit: 2121

attributes of said subject, wherein said training set is to provide a base of data for said method or d) selecting and storing a random sub-sample of said training set while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up time (*Cook et al*, column 20, lines 59-67), computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Bertrand et al* as taught by *Cook et al* and *Oten et al* for the purpose of reducing start up time, computational complexity and memory space.

**Regarding claim 19:**

The rejection of claim 19 is the same as that for claims 17, 11 and 3 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 20:**

The rejection of claim 20 is the same as that for claims 17, 12 and 4 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 21:**

The rejection of claim 21 is the same as that for claims 17, 13 and 5 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 22:**

The rejection of claim 22 is the same as that for claims 17, 14 and 6 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 23:**

The rejection of claim 23 is the same as that for claims 17, 15 and 7 as recited above since the stated limitations of the claim are set forth in the references.

**Regarding claim 24:**

The rejection of claim 16 is the same as that for claims 17, 16 and 8 as recited above since the stated limitations of the claim are set forth in the references.

Claims 2, 10 and 18 are rejected under 35 U.S.C. 103(a) as being obvious over *Bertrand et al* in view of *Cook et al* in view of *Oten et al* and in further view of *Yumoto et al* "Customization rule generation for electronic sales promotion system in wholesale industry" (8-9 April 1999).

**Regarding claim 2:**

*Bertrand et al* teaches,

- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existent database of information (Abstract), wherein said information are attributes of said subject (column 62, lines 38-46)

Art Unit: 2121

- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject
- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored
- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)
- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action (column 12, lines 17-22) relative to said subject for said objective of said outcome (column 11, lines 49-67)

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method, d) selecting and storing a random sub-sample of said training set or said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

*Yumoto et al* teaches,

- said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity (page 51, section 3.1)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up (*Cook et al*, column 20, lines 59-67) and promotion (*Yumoto et al*, page 54, section 5, paragraph 3 and page 55, paragraph 1) times, computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Bertrand et al* as taught by *Cook et al*, *Oten et al* and *Yumoto et al* for the purpose of reducing start up and promotion times, computational complexity and memory space.

**Regarding claim 10:**

*Bertrand et al* teaches,

- a bus (column 5, lines 2-21)

- a memory unit coupled to said bus (Fig. 1, items 114, 116)

- at least one processor coupled to said bus, said at least one processor for executing a method for action selection based upon an objective of an outcome relative to a subject (Fig. 1, item 110)

- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existing database of information (Abstract), said information are attributes of said subject (column 62, lines 38-46), wherein said set is to provide a base of data for said method

- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject

- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored

- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)

- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action (column 12, lines 17-22) relative to said subject for said objective of said outcome (column 11, lines 49-67)



Art Unit: 2121

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existing database of information, said information are attributes of said subject, wherein said training set is to provide a base of data for said method, d) selecting and storing a random sub-sample of said training set or said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existing database of information, said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

*Yumoto et al* teaches,

- said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity (page 51, section 3.1)

Motivation – The portions of the claimed method would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up (*Cook et al*, column 20, lines 59-67) and promotion (*Yumoto et al*, page 54, section 5, paragraph 3 and page 55, paragraph 1) times, computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made, to modify *Bertrand et al* as taught by *Cook et al*, *Oten et al* and *Yumoto et al* for the purpose of reducing start up and promotion times, computational complexity and memory space.

**Regarding claim 18:**

*Bertrand et al* teaches,

- a) acquiring and storing (column 80, lines 41-45) a set (column 21, lines 10-27), said set an existent database of information (Abstract), wherein said information are attributes of said subject (column 62, lines 38-46), wherein said set is to provide a base of data for said method
- b) calculating (column 11, lines 25-39) and storing (Fig. 2, items 230, 234, and 270) a best behavioral (column 25, lines 44-50) model (column 26, lines 51-59) for predicting (column 28, lines 8-22) said outcome (column 11, lines 49-67), provided an action is applied to said subject
- c) mapping (column 43, lines 12-24) of a set to said best behavioral model within a business (column 12, lines 1-16) metric (column 91, lines 17-43) space (column 5, lines 53-65; column 49, lines 34-40), wherein said mapping is subsequently stored
- d) a sample (column 91, lines 38-43) mapped (column 81, lines 42-50) to said best behavioral model, said sample utilized for reducing computational requirements (column 19, lines 36-44) when determining an optimized strategy (column 12, lines 17-22)
- e) determining and storing said optimized strategy (column 68, lines 63-67; column 689, lines 1-8) for said sample, said optimized strategy for providing an optimal action

Art Unit: 2121

(column 12, lines 17-22) relative to said subject for said objective of said outcome

(column 11, lines 49-67)

However, *Bertrand et al* doesn't explicitly teach a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method, d) selecting and storing a random sub-sample of said training set or said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity while *Oten et al* teaches,

- a) acquiring and storing a training set, said training set an existent database of information, wherein said information are attributes of said subject, wherein said training set is to provide a base of data for said method (Abstract)

*Cook et al* teaches,

- d) selecting and storing a random sub-sample of said training set (column 61, lines 11-44)

*Yumoto et al* teaches,

- said subject is a customer of a business entity, said business entity enabled to interact with said customer in a web based environment, and wherein said action is a promotion offered by said business entity (page 51, section 3.1)

Motivation – The portions of the claimed medium would have been a highly desirable feature in this art for prefetching or caching software components to reduce start up (*Cook et al*, column 20, lines 59-67) and promotion (*Yumoto et al*, page 54, section 5,

paragraph 3 and page 55, paragraph 1) times, computational complexity and memory space (*Oten et al*, page 691, right column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Bertrand et al* as taught by *Cook et al*, *Oten et al* and *Yumoto et al* for the purpose of reducing start up and promotion times; computational complexity and memory space.

### **RESPONSE TO APPLICANTS' AMENDMENT REMARKS**

Applicant argues that no new matter has been added in the 8/17/04 amendment (Amendment REMARKS page 11, paragraph 1).

#### ***Drawings, Specification and Claims Objections***

Applicant argues that the lines shown coupling the components depicted in Figures 1-4 represent component connections that involve two way communications and are accepted as a proper manner of depicting connections between such components (Amendment REMARKS page 11, paragraph 2). Applicant's arguments have been fully considered and are persuasive. The objection to Figures 1-4 is withdrawn.

Applicant argues that the specification has been amended in a manner so as to obviate the earlier objections (Amendment page 11, paragraph 3). Applicant's arguments have been fully considered. The "on screen cursor device 143" objection to

the specification is withdrawn. However, the use of the NETSCAPE trademark objection still stands.

Applicant argues that the claims have been amended to eliminate any informalities previously objected to (Amendment REMARKS page 11, paragraph 4). Applicant's arguments have been fully considered and are persuasive. The objections to claims 9-24 are withdrawn.

***Claim Rejections - 35 USC § 101***

Applicant argues that the amendment to claim 1 obviates the rejection under 35 USC 101 (Amendment REMARKS page 12, paragraph 1). Applicant's arguments have been fully considered and are persuasive. The 35 USC 101 rejection of claim 1 is withdrawn.

***Claim Rejections - 35 USC § 103***

Applicant argues that Becker et al USPN 5,930,803, Galperin et al USPN 6,185,543, Georgilakis et al "A neural network framework for predicting transformer core losses" and Mangasarian "Breast Cancer Diagnosis via Linear Programming" do not teach or suggest a method, system or program for: 1) calculating and storing a best behavioral model for predicting an outcome, provided an action is applied to a subject, and 2) determining and storing an optimized strategy for a random sub-sample where the optimized strategy is for providing an optimal action relative to the subject for the objective of the outcome as in claims 1, 6, 9, 14, 17 and 22 (Amendment REMARKS

page 16, paragraph 2). Applicants' arguments have been fully considered, but are moot in view of the above new grounds of rejection under 35 USC 103.

The examiner agrees that Becker et al, Galperin et al, Georgilakis et al and Mangasarian taken either individually or in combination do not disclose the method, system or program of the inventions defined in claims 1, 6, 9, 14, 17 and 22. However, Bertrand et al USPN 6,085,184, Cook et al USPN 5,727,950 and Oten et al "A new structure-preserving dimensionality reduction approach and OI-net implementation" are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants:

Bertrand et al column 11, lines 25-39, Fig. 2, items 230, 234, and 270, column 25, lines 44-50, column 26, lines 51-59, column 28, lines 8-22 and column 11, lines 49-67 are cited for addressing 1) calculating and storing a best behavioral model for predicting an outcome, provided an action is applied to a subject while Bertrand et al column 91, lines 38-43, column 81, lines 42-50, column 19, lines 36-44 and column 12, lines 17-22 is cited in combination with Cook et al column 61, lines 11-44 and the Abstract of Oten et al for addressing 2) determining and storing an optimized strategy for a random sub-sample where the optimized strategy is for providing an optimal action relative to the subject for the objective of the outcome. Furthermore, Cook et al column 20, lines 59-67 and Oten et al, page 691, right column, paragraph 1 give reducing startup time and memory space, respectively, as the purpose and motivation for modifying Bertrand et al as taught by Cook et al and Oten et al.

As set forth above with regards to Bertrand et al, Cook et al and Oten et al, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, Bertrand et al's System, method and article of manufacture for a dynamic toolbar in a tutorial system, Cook et al's Agent based instruction system and method and Oten et al's A new structure-preserving dimensionality reduction approach and Ol-net implementation.

### ***Conclusion***

The following prior art made of record is considered pertinent to applicant's disclosure:

- *Ouimet et al* USPN 6,308,162; Method for controlled optimization of enterprise planning models

Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB

/am-a



Anthony Knight  
Supervisory Patent Examiner  
Group 3600